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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,384

06/03/2005

Richard N Fargo

60469-220;OT-5079

4539

7590 11/18/2008  
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EXAMINER

SINGH, KAVEL

ART UNIT

PAPER NUMBER

3651

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DELIVERY MODE

11/18/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,384	<b>Applicant(s)</b> FARGO ET AL.	
	<b>Examiner</b> KAVEL P. SINGH	<b>Art Unit</b> 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/03/05</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claim 1-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6,8,13,14,15,16,18,19, and 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boltrek U.S. Patent No. 3,677,388 in view of Hart U.S. Patent No. 6,516,940.

Claim 1, Boltrek teaches an inner side adapted to engage a drive member (23) (C3 L1-2); and an outer side including a plurality of teeth (13) that are adapted to engage a corresponding portion of a step chain (11), the outer side teeth each including a base and a pliable projection (13+) distal from the base (Fig. 2), Boltrek does not teach the outer side teeth that are pliable, but Hart teaches a urethane drive belt (65). It would be obvious to one of ordinary skill to use urethane as taught by Hart in order to make the belt pliable to increase the flexibility and fitting into the step chain.

Claim 2, Boltrek teaches the compressible (13+) projections are rounded (Fig. 2).

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Claim 3, Boltrek teaches the teeth (13+) include a generally concave surface extending between the projection and the base (Fig. 2).

Claims 4,6,15, and 16, Boltrek teaches the teeth (13+) each have an engaging surface profile that includes the projection, the engaging surface (71) including a first concave portion having a first radius of curvature beginning adjacent the base, a second concave portion having a second radius of curvature adjacent the first portion and a third concave portion having a third radius of curvature extending between the second portion and the projection (Fig. 2) (C3 L23-28).

Claim 8, Boltrek teaches the teeth (13+) each include a relief near the projection that increases the compliance of the tooth near the projection (C3 L38-40).

Claims 13 and 26, Boltrek teaches a step chain (11) having a plurality of links (13) each having a plurality of engaging members (C2 L70-71); a drive mechanism (23); and a belt having an inner side that cooperates with the drive mechanism and an outer side including a plurality of teeth (13+) having engaging surfaces that are at least partially concave, a portion of the teeth elastically deforming responsive to contact with the engaging members on the step chain wherein movement of the drive mechanism causes movement of the belt which causes movement of the step chain (Fig. 2) (C3 L1-5) Boltrek does not teach the outer side teeth that are pliable, but Hart teaches a urethane drive belt (65). It would be obvious to one of ordinary skill to use urethane as taught by Hart in order to make the belt pliable to increase the flexibility and fitting into the step chain.

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Claim 14, Boltrek teaches the step chain (13) engaging members include teeth (13+) having a convex surface that is at least partially received within the concave portion of the belt teeth engaging surfaces (Fig. 2).

Claims 18 and 19, Boltrek teaches the first, second and third portions establish the concave portion of the engaging surface and the projection establishes a convex portion of the engaging surface (Fig 2) (C3 L35-36).

Claims 9 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boltrek U.S. Patent No. 3,677,388 in view of Hart U.S. Patent No. 6,516,940 in further view of Novak U.S. Patent No. 5,625,021.

Claim 9, Boltrek teaches the teeth, but Novak teaches a belt comprise a urethane material (C7 L12-13). It would be obvious to one of ordinary skill to use a urethane belt as taught by Novak into the invention of Boltrek since urethane is known to be stretchable and will conform to fit into the engaging surface.

Claims 23,24, and 25, Boltrek does not teach as Novak teaches the inner side and outer side are on opposite sides of a belt body and wherein the belt body comprises the urethane material and a projection near an end of the teeth spaced from the body (C7 L7-12). It would have been obvious to one of ordinary skill to use urethane material for the belt as taught by Novak into the invention of Boltrek in order to allow the belt to wear, but not break during use.

***Allowable Subject Matter***

Claim 5,7, 10,11,12,17,20,21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Kavel P. Singh whose telephone number is (571) 272-2362. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KPS

/Gene Crawford/  
Supervisory Patent Examiner, Art  
Unit 3651

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